



A COMPARATIVE STUDY OF INDUCED BREEDING OF INDIAN MAJOR CARPS WITH THE HELP OF PITUITARY EXTRACT, HCG AND OVAPRIM

Arshiya Shaikh and Pramod Rokade*

R. B. Attal Arts, Science and Commerce College, Georai, Dist. Beed - 431127

*Balbhim Arts, Science and Commerce College, Beed - 431122

(Corresponding Author: E mail: drpramodroka@gmail.com)

ABSTRACT

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With increasing population we have to match up the food requirements and nourishment along with cheap protein source for poor people in India and abroad. 4 mg/kg per body two doses for female and one for male for pituitary extract, 0.4 ml/kg, of ovaprim and 1-SIU/G body weight. In the induced breeding techniques, pituitary extract and HCG the fertilization rate was 65-72% as compared to the ovaprim which was 91-95% fertilization rate and survival of the young ones.

KEY WORDS : hormones, induced breeding, ovaprim, Pituitary gland.

INTRODUCTION

Day by day increasing population is the major problem in India, and to meet the food demands induced breeding comes into focus. To meet the demands induced breeding is a very old practice carried out in India and China at the same time Rokade *et al.* (2006).

The fertilization rate of Pituitary extract and HCG is very low as 65-70% and Ovaprim 91-95% which solves many problems of food and their demand. The basic requirements of fish breeding is the necessity of fish seed for culture, and that too should be pure and with quality. In older days fish seeds of carps were collected from the rivers, and with the carp seeds there would be mixed seeds of predatory fishes which were consuming the carp seeds and affecting the rate of survival Nandeesha *et al.* (1989).

To overcome this problem a rock solid solution was necessary which came forward in the form of Ovaprim - a synthetic hormone which contains analogue of Salmon GnRH and dopamine inhibitor required for culturable species Rokade *et al.* (2006).

MATERIALS AND METHODS

Human chorionic gonadotropin and ovaprim are synthetic hormones which are readily available in the market but for pituitary extract we have to follow the procedure. Pituitary gland from fresh brooder fishes are collected and preserved in alcohol. Just before injecting the fish, the extract is prepared. Pituitaries were taken in a mortar and pestle and grinded till the glands completely dissolve in the saline water.

This solution was taken in the test tube and was centrifuged and the supernatant was used as the pituitary extract for injections with 9 mg/kg two times for female and 4.5 mg/kg for male which is given during the second injections of female. First dose was given to the female at 4 pm in the